

ABSTRACT

A process for production of hydrocarbons including a) reforming a divided hydrocarbon feedstock stream, mixing the first stream with steam, passing the mixture over a catalyst disposed in heated heat exchange reformer tubes to form a primary reformed gas, forming a secondary reformer feed stream including the primary reformed gas and the second hydrocarbon stream, partially combusting the secondary reformer feed stream and bringing the partially combusted gas towards equilibrium over a secondary catalyst, and producing a partially cooled reformed gas, b) further cooling the partially cooled reformed gas below the dew point of steam therein to condense water and separating condensed water to give a de-watered synthesis gas, c) synthesising hydrocarbons from the de-watered synthesis gas by the Fischer-Tropsch reaction and separating some of the synthesised hydrocarbons into a tail gas, and d) incorporating part of the tail gas into the secondary reformer feed stream before partial combustion thereof.